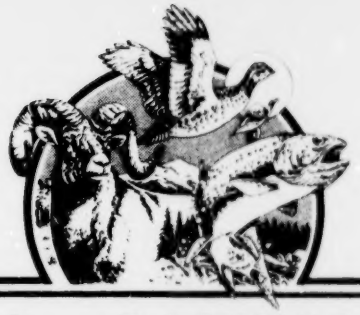

Alberta Fish & Wildlife
YOUR PARTNER IN CONSERVATION

FISH AND WILDLIFE DIVISION
NORTHEAST REGION
1983/84 ANNUAL SUMMARY

Alberta
ENERGY AND
NATURAL RESOURCES
Fish And Wildlife Division

FISH AND WILDLIFE DIVISION

NORTHEAST REGION

1983/84 ANNUAL SUMMARY

St. Paul, 1984

ENERGY AND
NATURAL RESOURCES
FISH AND WILDLIFE DIVISION

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1. INTRODUCTION

The Northeast (NE) Region of the Fish and Wildlife Division operated in 1983/84 with a manpower allotment of 72.5 permanent man years and a total budget of $2,696,840. The purpose of this annual summary is to indicate what the region of the Fish and Wildlife Division achieved during the fiscal year.

The region extends from Provost to Drayton Valley in the south, to the Northwest Territories on the north and Saskatchewan on the east (Figure 1) an area which is approximately 30.4 percent of the province. The region includes 940,001 people, 42.0 percent of the provincial population (1981 census).

2. ROLE OF THE FISH AND WILDLIFE DIVISION

The role of the Fish and Wildlife Division is to manage fish and wildlife resources for the people of the province (Figure 2).

The graphs portray three situations which can exist and these are the key to our management philosophies and programs: underutilization, overutilization, and harvest equalling production.

Two aspects thus are instrumental to management programs, which basically deal with the resource and the people (the users):

(a) the amount of resource available
(b) the amount of resource allocated or used.

Both are major areas of responsibility found within the regional fisheries and regional wildlife biologists' job descriptions.

The two sections most instrumental in maintaining the resource base are Habitat and Enforcement/Field Services. Legislation is in part intended to maintain that resource base but many of the laws are intended to protect the user or to distribute the resource in an equitable fashion.

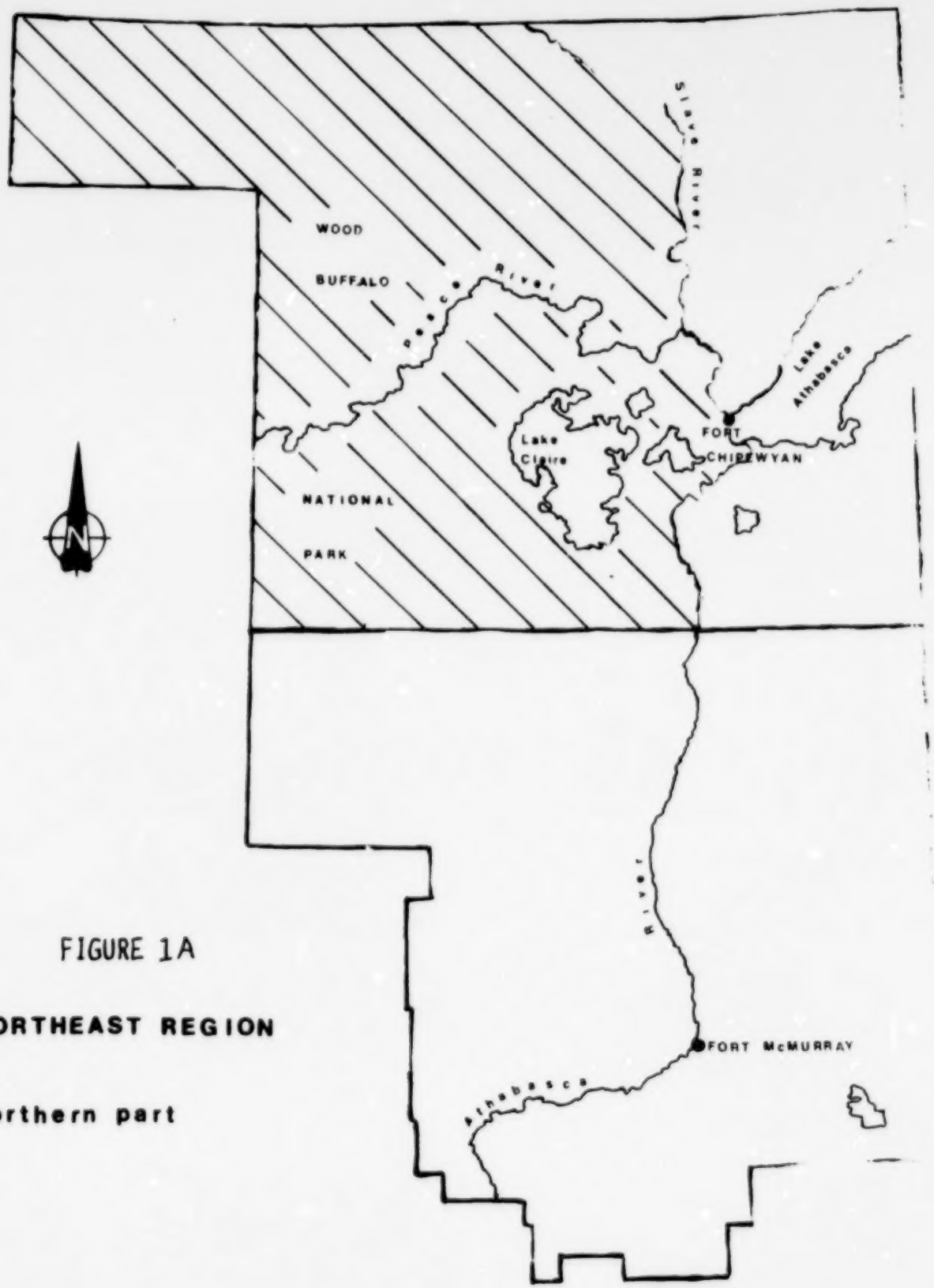


FIGURE 1A

NORTHEAST REGION

Northern part

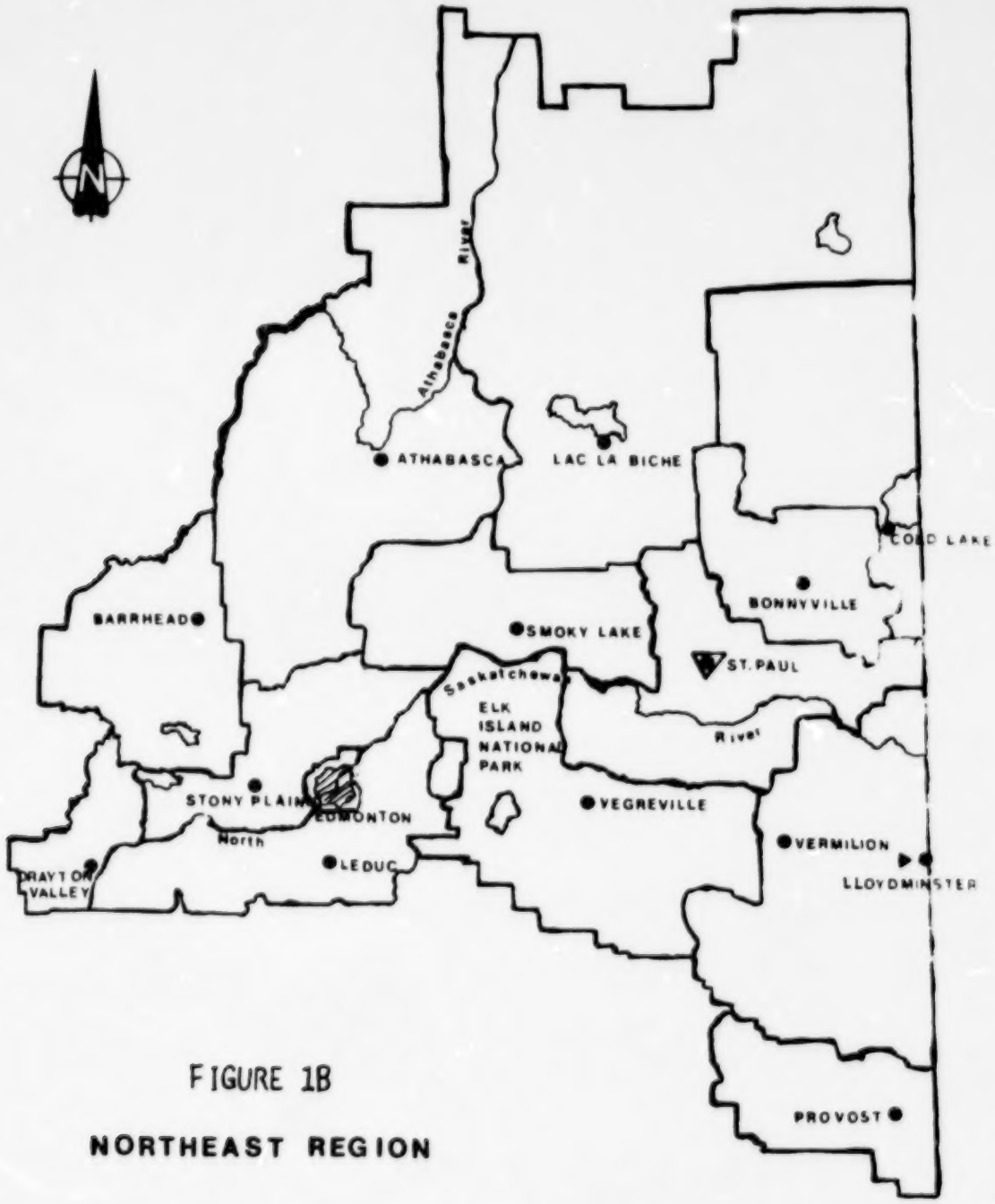


FIGURE 1B

NORTHEAST REGION

Southern part

● District Office

▽ Regional Office

▸ District Sub-Office

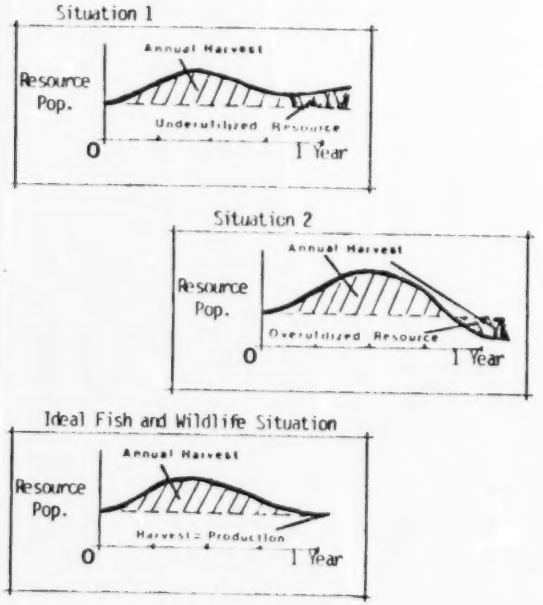
Figure 2

FISH AND WILDLIFE MANAGEMENT

Enforcement/Field Service Effort
--maintains the fish and wildlife resource base and ensures fair use of various user groups

(a) Regulatory
(b) Public service - bears, beavers, ungulates, skunks
(c) Education/information

All fish and wildlife populations produce new animals each year. The object in good management is to allow various user groups to harvest this annual production. The two situations below show an underutilization and an overutilization of the fish and wildlife resource. The Fish and Wildlife Division deals with both through various efforts to benefit Albertans and to ensure that ideal utilization of resources is maintained.



Habitat Protection Effort
--maintains the fish and wildlife resource base

Monitoring of:
--industrial activities
--agricultural development
--water resources
--recreation development
--road construction
--timber harvest
--urban development

Fisheries Management Effort
--monitors, develops and integrates fishery resources among all user groups

(a) Lake inventories
(b) Monitoring populations
(c) Monitoring users--commericial, domestic and recreational
(d) Integrated management strategies
  -regulation assessment
  -habitat development
  -habitat protection
  -fish stocking and transplants
  -information/education
(e) Special programs
  -fish edibility checks
  -public access

Wildlife Management Effort
--monitors, develops and integrates wildlife resources among all user groups

(a) Inventories
(b) Monitoring populations
(c) Monitoring users
(d) Integrated management strategies
  -stocking and transplants
  -habitat development
  -regulatory functions
  -access development
(e) Special programs
  -crop depredation control
  -trappers compensation
  -nuisance wildlife
  -game ranching

Underutilized Resource Strategy
(a) Promotion of available resource
(b) Education of anglers
(c) Increasing commericial take
(d) Modifying regulations

Overutilized Resource Strategy
(a) Stocking programs
(b) Habitat development
(c) Increased access to unused areas
(d) Adjusting regulations
(e) Promotion of other areas
(f) Education to adjust the service standard
(g) Transplants

In managing consumptive users we must assess whether we have an overused or underused resource base. The fisheries or wildlife manager must then decide how he may best manage the specific situations. Generally, if resources are in short supply he must look at options such as:

(a) stocking programs,
(b) habitat development
(c) increased access to unused areas,
(d) adjust regulations,
(e) promote other species or areas,
(f) educate to adjust the service standard demanded by the user, and
(g) transplants.

If the Fish and Wildlife manager has an unused resource he may:

(a) promote the resource availability for increased utilization,
(b) educate the user to be more successful (techniques),
(c) increase commercial utilization, and
(d) modify regulations.

This basic concept can be used in a similar way for the management of non-consumptive species or problem wildlife but the resulting methodologies or strategies may differ.

Beside the basic Fish and Wildlife management functions additional "special programs" become a part of the Fish and Wildlife duties. The special programs include such items as:

(a) nuisance wildlife (beavers, bears, wolves, ungulates, skunks, etc.),
(b) crop damage control (ducks, geese),
(c) trappers compensation,
(d) suitability of fish and wildlife for human consumption, and
(e) game ranching.

The overall Fish and Wildlife function is a combination of work done by officers (Enforcement/Field Services sections), biologists and technicians (Fisheries, Wildlife and Habitat Protection sections), and clerks and administrators in the Administrative Services section.

3. ORGANIZATION AND BUDGET

During the 1983/84 fiscal year permanent manpower of 72.5 man-years (Figure 3) was supplemented by 40 man-months from Summer Temporary Employment program (S.T.E.P.), 77 man-months from Employment Skills Program (E.S.P.), 36 man-months from Priority Employment Program (P.E.P.), and 47 man-months of wage manpower for a total of 200 man-months of extra manpower.

In 1983/84, the NE Region had 33 man-years in Enforcement/Field Services, 23.5 man-years in Administration, six man-years in Wildlife, seven man-years in Fisheries and three man-years in Habitat Protection. (Table 1). The region staff was also supplemented with additional temporary manpower which totaled 16.7 man-years. The contribution of this manpower is extremely significant to the overall program.

Table 1.

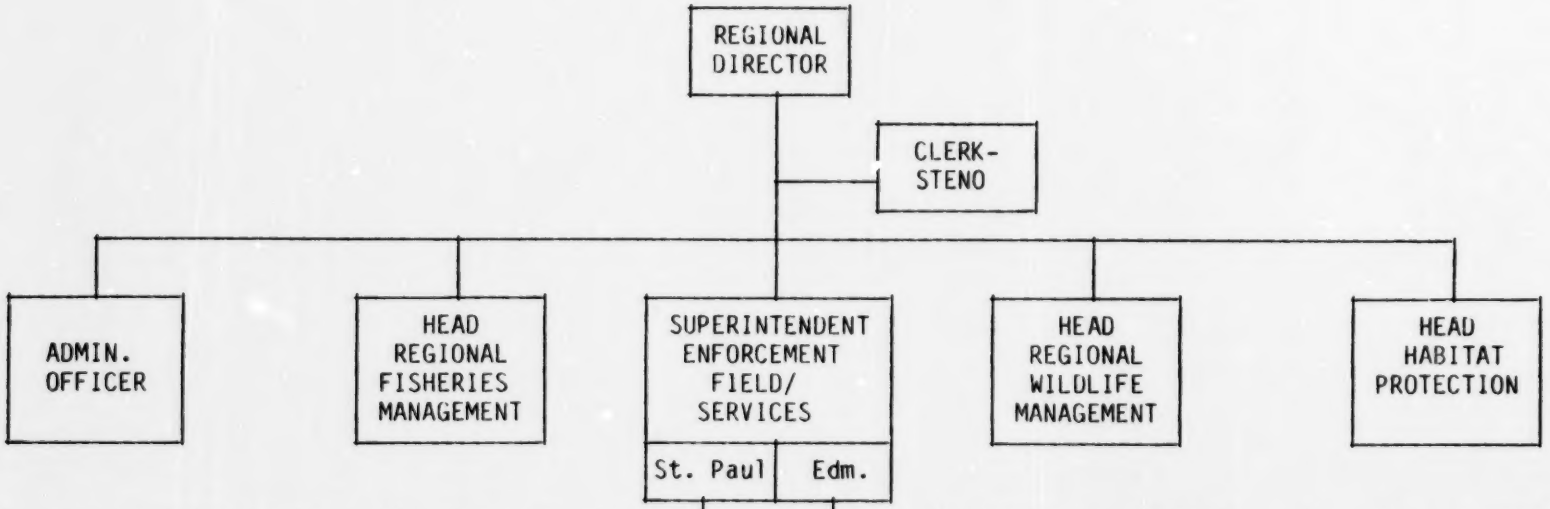
COMPARISON OF PERMANENT MANPOWER UTILIZED BY THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84	% Change
Administration	18.5	24.5	23.5	-4.1%
Enforcement/ Field Services	33	34	33	-2.9%
Fisheries Services	6	8	7	-12.5%
Wildlife Services	5	6	6	nil
Habitat Protection	2	3	3	nil
Total	64.5 (10.7)*	75.5 (14.9)*	72.5 (16.7)*	-4.0%

NOTE: All figures recorded as man-years.

* Temporary man-years in brackets.

PERMANENT MANPOWER IN THE NORTH EAST REGION 1983/84



St. Paul - 2.5 positions
Edmonton - 4 positions
TOTAL - 7.5 positions

St. Paul - 4 positions
Edmonton - 2 positions
TOTAL - 7 positions

St. Paul - 3 positions
Edmonton - 2 positions
TOTAL - 6 positions

St. Paul - 1 position
Edmonton - 1 position
TOTAL - 3 position

BONNYVILLE - 3 positions
COLD LAKE - 3 positions
FORT CHIPEWYAN - 1 position
FORT McMURRAY - 6 positions
LAC LA BICHE - 5 positions
PROVOST - 1.5 positions
SMOKY LAKE - 2 positions
ST. PAUL - 1 position
VERMILION - 2 positions
LLOYDMINSTER - 2 positions

10 DISTRICTS - 27.5 positions

ATHABASCA - 4 positions
BARRHEAD - 3 positions
EDMONTON - 3 positions
DRAYTON VALLEY - 1.5 positions
LEDUC - 2 positions
STONY PLAIN - 3 positions
VEGREVILLE - 2 positions

7 DISTRICTS - 19.5 positions

TOTAL - 17 DISTRICTS - 47 positions
TOTAL MAN YEARS - 72.5
TOTAL REGIONAL STAFF - 74

Table 2.

BUDGET SUMMARY FOR THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

	ALLOCATED			EXPENDED
	Supplies and Services	Manpower	Total	Total
Administration	208,658.00	434,700.00	643,358.00	632,459.39
Enforcement/ Field Services	350,952.00	928,921.00	1,279,873.00	1,272,572.57
Fisheries Services	127,792.00	224,334.00	352,126.00	313,943.02
Wildlife Services	85,473.00	192,930.00	278,403.00	271,125.52
Habitat Protection	56,320.00	86,760.00	143,080.00	117,200.57
Total	829,195.00	1,867,645.00	2,696,840.00	2,607,301.07

The budget allocated to the NE Region in 1983/84 was $2,696,840. of which $2,607,301.07 (96.7 percent) was spent (Table 2). The breakdown of the budget shows 47.5 percent allocated to Enforcement/Field Services, 23.8 percent to Administration, 13.1 percent to Fisheries, 10.3 percent to Wildlife and 5.3% to Habitat Protection. A comparison of previous years budgets indicates a relatively stable budget with virtually no growth during the past two years (Table 3).

Table 3. COMPARISON OF BUDGET EXPENDED IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1982-83 AND 1983-84.

	1982/83	1983/84
Administration	492.159.27	632,459.39
Enforcement/ Field Services	1,269,959.23	1,272,572.57
Fisheries Services	272,979.92	313,943.02
Wildlife Services	262,480.17	271,125.52
Habitat Protection	102,014.63	117,200.57
Total	2,399,593.22	2,607,301.07

4. FISHERIES

There are approximately 6,560 lakes in the NE Region, of which only about 325 are known to be able to support a fishery. Most of the lakes containing fish occur in the Fort Chipewyan, Lac La Biche, Cold Lake, St. Paul, Athabasca, Fort McMurray and Bonnyville districts. The river systems are less well known. Most of the river angling opportunities are in the Fort McMurray and Lac La Biche districts except for the main river channels which flow along or through the region.

There is heavy user pressure on the fisheries resource in the NE Region. Based on the 1980 Federal-Provincial Sports Fishing Questionnaire results, 37.4 percent of Alberta's angling effort occurs in the NE Region. Extrapolations based on the number of additional unlicenced anglers less the inactive anglers and multiplied by the average number of days fished in 1980 (17.6 days) give an estimated NE Region total angler effort in 1983/84 of 2.667 million man-days.

There is also strong commercial fishing effort in this area. Forty-three of the 91 fisheries scheduled to open in Alberta in 1983/84 were in the NE Region.

The third major user group in the region is the domestic net fishermen. There were 1,088 Indian Domestic licences issued in the region in 1983/84.

4.1 Inventory

A wide variety of inventory activities were conducted in 1983/84 (Table 4). Walleye tagging operations were completed at Wolf and Beaver lakes. Fish movements were checked at Deep, Flat, and Majeau creeks as well as the tributaries to Wabamun Lake. Phase I inventory work was done on 115 lakes; most of the work was completed by contract. Summer habitat and water quality were checked at 40 lakes as part of our 10-year rotational system. Winter oxygen levels were checked at 25 sites that are regularly stocked with rainbow trout. A contract was developed for the Richardson Lake walleye work and Fisheries assisted in the selection of the consultants at the Owl River, Moose Lake and the Sand River.

In addition, most of the 1:50,000 map sheets covering the NE Region were examined and all permanent and named intermittent lakes were numbered. Surface-area calculations of these lakes were completed for about two-thirds of the map sheets. This inventory work was done at a total cost of $26,355.30 (8.2 percent of the total fisheries budget).

Table 4.

FISHERIES INVENTORY IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

Activity	Number of Sites
Phase I inventory	115
Phase II inventory	0
Spawning inventory	6
Habitat monitoring (rotational program)	40
Winter oxygen tests (stocked lakes)	25
TOTAL	186

4.2 Monitoring Populations

Fish kills were investigated on the North Saskatchewan River, Lac Sante, Chickenhill Lake, Vermilion River, Sandy Lake, Lone Pine Lake and Antoine Lake. The North Saskatchewan River kill which occurred August 11 and 12, 1983, was by far the largest. Probably several thousands of fish (mostly suckers) died, as dead fish were reported from Redwater to an area 50 km into Saskatchewan. It appears this fish kill was due to oxygen supersaturation which was caused by low water flows and high water temperatures, but the possibility of pollution could not be ruled out nor confirmed.

Total winter fish kills were not observed in any water body in the NE Region.

In 1983/84, 28 lakes were checked for the population status of commercial species (Table 5). The indication from these lakes is that 67.8 percent have remained stable while 25.0 percent display a decline and 7.2 percent show an increase in population.

Table 5

MONITORING OF COMMERCIAL FISH POPULATIONS MONITORED IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEAR 1983/84.

Commercial Fisheries	Target Species	Population Status
Zone B		
Lac Ste. Anne	Whitefish	- Stable
Wabamun	Whitefish	- Decrease
Zone C		
Bangs	None	- Stable
Burnt	Whitefish	- Stable
Cold	Whitefish, tullibee	- Decrease
Ethel	Whitefish	- Stable
Hilda	Tullibee	- Stable
Ipiatik	Whitefish	- Stable
Kehiwin	Tullibee	- Stable
Moose	Whitefish	- Decrease
Muriel	Whitefish	- Problem area; serious over-fishing
Primrose	Whitefish	- Decrease
Spencer	Whitefish	- Decrease
Tucker	Pike	- Stable
Wolf	Whitefish	- Increase
Zone D		
Amisk	Whitefish, tullibee	- Stable
Beaver	Whitefish	- Stable
Frenchman	Whitefish	- Slight increase
Fork	Whitefish	- Problem area; serious over-fishing
Helena	Whitefish	- Stable
Kinnaird	Tullibee	- Stable
Lac La Biche	Whitefish, tullibee	- Stable
North Buck	Whitefish	- Stable
Touchwood	Whitefisn	- Stable
Whitefish	Tullibee	- Stable
Zone E		
Calling	Pike	- Stable
Orloff	Tullibee	- Stable
Zone H		
Lake Athabasca	Whitefish, walleye	- Stable

A decline in the whitefish population was noted at Moose Lake. Heavy domestic fishing pressure during the spawning season appeared to be one of the major factors affecting the lake whitefish. Walleye were probably also heavily harvested but accurate information is not available.

Sport fish populations from 10 lakes were monitored during creel surveys but the data has yet to be processed.

The total cost of the population monitoring program was $94,348.00 (29.3 percent of the total fisheries budget).

4.3 Monitoring Users

4.3.1 Domestic Fishery

In 1983-84, 1088 Indian Domestic licences were issued and extrapolation of December, 1983 results[1] indicated that these licences were given to 462 individuals. The number of licences varied from 1 to 172 in the different lakes (Table 6). The total harvest for 1983-84 is difficult to determine but minimal interviews with licencees suggested that these people in the Lac La Biche area harvested 173.2 kg each. Based on this average the estimated total harvest was 80,000 kg.[2]

However, previous calculation of harvest based on an estimated catch of 30 fish a month would result in a harvest of 195,259.8 kg by 462 individuals. If 30 fish were kept each month for each of the 1,088 licences, the estimated harvest would be 459,832.3 kg.

1 December results indicated 1,024 licences issued to 435 licencees.

2 Determined by 462 licencees harvesting 173.2 kg each. Confidence limits are unknown.

Table 6.

INDIAN DOMESTIC LICENCES ISSUED
PER LAKE IN THE NE REGION OF THE
FISH AND WILDLIFE DIVISION FOR THE YEAR 1983-84.

Lake	Licences Issued	Lake	Licences Issued
Athabasca	5	Jackson	1
Bangs	1	Johnson	1
Banks	1	Kehiwin	33
Beaver	172	Lac La Biche	2
Bourque	22	Lac St. Anne	18
Boyne	65	Lac Sante	1
Calling	8	Long	6
Christina	1	Marie	1
Clearwater	1	May	3
Cold	116	McGregor	1
Devil's	2	Moose	101
Elinor	25	Muriel	35
Ethel	8	North Buck	20
Fishing	3	Pigeon	1
Fork	103	Pinehurst	17
Frenchman	47	Rock Island	4
Frog	13	Royne	1
Gardiner	2	Saddle	2
Goodfish	21	Touchwood	1
Gregoire	7	Tucker	3
Grist	1	Wayetenau	2
Gypsy	2	Whitefish	59
Hanmore	18	Winefred	1
Heart	6	Wolf	9
Helena	29	Wabamun	4
Ironwood	82		
		Total	1,088

Table 7.

ESTIMATED INDIAN DOMESTIC HARVEST
BY SPECIES IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

Species	Estimated % of Catch	Number of fish	Average Weight	Harvest
Whitefish	78.0	129,730	1.1 kg	142,703.0 kg
Tullibee	2.0	3,326	0.8 kg	2,660.8 kg
Walleye	7.5	12,474	1.5 kg	18,711.0 kg
Pike	7.5	12,474	1.5 kg	18,711.0 kg
Other	5.0	8,316	1.5 kg	12,474.0 kg
Total	100.0	166,320		195,259.8 kg

NOTE: 462 licencees at an estimated average of 30 fish per month equals 166,320 fish per year.

4.3.2 Recreational Fishery

In 1983/84, 13 creel surveys were conducted on 10 lakes in the NE Region. This is down from the 26 surveys conducted in 1982/83, but more intensive surveys were completed in 1983/84 (Table 8). During the summer of 1983/84 the success rate for the 8,832 anglers contacted by the Fisheries staff was:

(a) Northern pike -- 0.23 fish per angler hour
(b) Walleye -- 0.14 fish per angler hour
(c) Yellow perch -- 0.07 fish per angler hour
(d) Lake whitefish -- 0.35 fish per angler hour
(e) Rainbow trout -- 0.07 fish per angler hour

The winter fishing success rate for the 2,159 anglers contacted was:

(a) Northern pike -- 0.20 fish per angler hour
(b) Walleye -- 0.15 fish per angler hour
(c) Yellow perch -- 0.10 fish per angler hour
(d) Lake whitefish -- 0.50 fish per angler hour
(e) Rainbow trout -- 0.03 fish per angler hour

A co-operative creel census program was initiated with seven fly-in fishing lodge operators and one charter aircraft company. The first data collection effort was too inconsistent to produce good harvest information, but this program is being repeated in 1984-85.

In addition to the above mentioned creel work, NE Region Fish and Wildlife Officers reported making 560 visits to native stock fisheries in 1983-84. They interviewed 8,730 anglers but these numbers are down from the 1,023 visits and 10,219 anglers interviewed in 1982-83. The 1983-84 angler success indicated by the officers is 0.19 northern pike per angler hour, 0.14 walleye per angler hour, 0.38 yellow perch per angler hour, and 0.01 lake whitefish per angler hour.

During 1983-84, Fish and Wildlife Officers also completed creel census work at the stocked trout fisheries. Ninety visits resulted in 821 anglers being interviewed. A total of 1,747 hours were fished and 446 rainbow trout were reported as caught implying an angler success rate of 0.26 fish per angler hour.

4.3.3 Commercial Fishery

During 1983/84, 30 of the 43 scheduled commercial fisheries were actually fished. Table 9 shows the actual harvest of the various fish species by the commercial fishermen in each zone. (The NE Region covers part of zones B and E and all of zones C, D and H.) Table 10 compares this harvest and the number of commercial licences issued over the past three years.

Table 10.

COMPARISON OF COMMERCIAL LICENCE SALES AND HARVEST IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Licences	716	1,067	979
Harvest (kg)	812,874	506,035	438,029

Table 8.

RESULTS OF THE CREEL CENSUS PROGRAM COMPLETED BY THE FISHERIES SECTION IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEAR 1983/84.

Site	Number of Visits	Angler Contacts	Harvest Spec.	Harvest No.	Harvest Mass	Per Unit Effort
Open Water Fisheries						
Beaver Lake	38	1,011	NP	754	1,131	0.24
			WA	812	1,218	0.26
			YP	678	203	0.21
Hasse Lake	51	954	RB	181	81	0.06
Heart Lake	38	335	NP	825	1,238	0.73
			WA	98	147	0.09
			YP	58	17	0.05
Seibert Lake	41	2,511	NP	1,858	2,787	0.09
			WA	3,264	4,896	0.16
Wabamun Lake	48	1,293	NP	624	936	0.19
			LW	1,179	1,297	0.35
			YP	20	6	0.01
Wolf Lake	46	2,728	NP	6,424	9,636	0.43
			WA	1,560	2,340	0.11

(Continued on next page)

Table 8. (Continued)

Site	Number of Visits	Angler Contacts	Spec.	Harvest No.	Harvest Mass	Per Unit Effort
Winter Fisheries						
Beaver Lake	29	497	NP	197	296	0.14
			WA	143	215	0.10
			YP	508	152	0.35
Blackett Lake	27	317	NP	520	780	0.25
			WA	609	914	0.29
			YP	508	152	0.20
Hasse Lake	17	543	RB	45	20	0.03
Jackson Lake	20	98	NP	89	134	0.26
			WA	48	72	0.14
			YP	133	40	0.39
Kinnaird Lake	24	142	NP	299	449	0.58
			WA	98	147	0.19
			YP	65	20	0.13
McGuffin Lake	20	81	NP	302	453	0.43
			WA	74	111	0.10
			YP	83	25	0.12
Wabamun Lake	5	481	NP	26	39	0.02
			LW	843	927	0.50
			YP	7	2	0.01
TOTAL	404	10,991	LW	2,022	2,224	0.40
			NP	11,918	17,879	0.28
			RB	226	102	0.05
			WA	6,706	10,060	0.18
			YP	1,969	591	0.26

NOTE: LW -- lake whitefish; NP -- northern pike; RB -- rainbow trout; WA -- walleye; YP -- yellow perch.

* The harvest mass is an estimate based upon average masses of each species: lake whitefish -- 1.1 kg; northern pike -- 1.5 kg; rainbow trout -- 0.45 kg; walleye -- 1.5 kg; yellow perch -- 0.3 kg.

Table 9.

COMMERCIAL FISHERIES HARVEST IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

Zone	Number of Fisheries	Quota kg	Harvest kg							
			Whitefish	Trout	Walleye	Pike	Perch	Tullibee	Others	Total
B	2	61,200 (4,750)	40,558		845	5,695			9,592	56,690
C	13	429,450 (20,475)	70,808	3,338	9,692	12,979	464	12,286	13,730	123,297
D	11	1,079,500 (73,475)	42,862		758	14,862	816	160,767	10,881	230,946
E	2	20,400 (10,200)	8,892		401	3,158		4,508	7,837	24,796
H	2	35,000 (47,500)	500		1,000	600			200	2,300
Tota	30	1,625,550 (156,400)	163,620	3,338	12,696	37,294	1,280	177,561	42,420	438,029

Note: Tolerance quotas in brackets.

4.3.4 Commercial Bait Fishery

A total of 51 licences were issued in 1983-84. The distribution of the licences is shown in Table 11.

Table 11.

COMMERCIAL BAIT FISHING LICENCE SALES
IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

Lake	Licences	Lake	Licences
Baptiste	2	Lac Ste. Anne	6
Beaver	3	Lake Isle	6
Brosseau	1	Little Fish	1
Cold Lake	1	Moose	5
Chump	1	Muriel	1
Fork	1	North Buck	3
Garner	1	Pigeon	4
Hanmore	1	Skeleton	2
Ironwood	1	Wabamun	2
Kehiwin	2	Unnamed	1
Lac La Biche	3	Unnamed	1
Lac La Nonne	2		
		Total	51

4.4 Integrated Management Programs

4.4.1 Regulation Assessment

Considerable review of regulations was made particularly in regard to (a) spring closures to all user groups, (b) domestic fishing recommendations, (c) commercial fishing yardage and mesh size recommendations, (d) commercial fisheries quotas and dates, and (e) special closures.

4.4.2 Habitat Development (Buck For Wildlife)

In 1983/84, the NE Region expended $81,239.61 on six projects which included 191.9 hectares of fish habitat (Table 12).

Table 12.

SUMMARY OF FISHERIES BUCK FOR WILDLIFE PROJECTS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEAR 1983/84.

Project	Monies Spent($)	Results Achieved
Mann Lakes	73,182.05	Dam is built. Water level is stabilized.
Bonnyville Town Pond	4,603.01	Pond deepened and stocked with trout.
Lloydminster Pond	275.22	Unable to find suitable development site.
Lamont	6.50	Negotiations with town continue for transfer of site.
Capt. Eyre Lake	6.50	Discussions with locals. Aeration appears too expensive.
Plamondon Creek	82.60	Bank examination; work with town and Environment 2000 on project.
Manpower	3,083.73	
Total Expenditure	81,239.61	

Table 13 compares the number of projects and the monies spent from Buck For Wildlife over the past three years.

Table 13.

COMPARISON OF FISHERIES BUCK FOR WILDLIFE EXPENDITURE IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Number of Projects	1	2	6
Monies Spent($)	67,590.00	873.50	81,239.61

4.4.3 Habitat Protection

Fisheries staff spent time on the following major issues:

Cold Lake -- Beaver River allocation study
Big Bend -- integrated resource plan
Lakeland -- integrated resource plan
Isle Lake management plan
Wabamun Lake management plan
Manatokan Lake fishway -- Ducks Unlimited project
Suncor pollution trial
Slave River hydro project

4.4.4 Fish Stocking and Transplants

Table 14 compares the numbers of fish stocked over the past three years. The major increase was noted in over one million walleye fry being introduced to Wabamun Lake. Of note were five transplants: Wabamun Lake (1,050,245 walleye) Thunder Lake (30,400 perch), Hastings Lake (36,000 perch), Lac Sante (38,000 perch) and Brock Lake (24,700 perch). A total of 112,641 of the 150,000 lake trout stocked into Cold Lake were fin-clipped for future identification and assessment of natural reproduction.

Assistance was provided to the Fish Culture section for monitoring water temperatures on Cold Lake for the new hatchery development and to K. Zelt for seining the Vegreville reservoirs. Appendix 1 lists all of the lakes stocked in 1983/84 in the NE Region. The region expended $12,500 on fish stocking and the provincial cost for NE Region fish was estimated at $465,720.

Table 14.

COMPARISON OF FISH STOCKING AND TRANSPLANTING IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 and 1983/84.

SPECIES	1981/82	1982/83	1983/84
Rainbow Trout	504,595	526,868	354,842
Lake Trout	208,321	159,980	150,000
Smallmouth bass	9,600	-	-
Yellow Perch	70,000	74,000	129,100
Walleye	-	168	1,050,245
Total	792,516	761,016	1,684,187
Number of sites	44	44	43
Total Cost (Fish)	$289,120.35	$267,581.04	$465,720.00

NOTE: Total 1983/84 regional cost: $12,500.

4.4.5 Public Information and Education

Fisheries staff met with members of the Two Hills, Chauvin, Devon, Provost, and Onoway Fish and Game Clubs as well as attending the Zone 5 Fish and Game Association spring meeting. Staff presented the fisheries portions of two hunter education classes and at the Lac Bellevue Fish and Game Conservation Camp. National Wildlife Week presentations were made in Edmonton and St. Paul. Fish were tagged at Lac Ste. Anne for the Uncles At Large derby.

Assistance was provided to groups in Willingdon, Kehiwin and St. Paul which were setting up Environment 2000 projects. Newspaper reporters were given assistance in the field for articles on Lac Delorme fish stocking, walleye tagging at Beaver Lake and Wabamun Lake fishing pressure. Field assistance was provided to a CBC film crew for a show about fishing and walleye. Information was also provided to the press and radio reporters regarding mercury concentrations in North Saskatchewan River fish.

A very large number of contacts were made with the general public but no records of numbers were kept.

4.5 Special Programs

Fish edibility checks were made on the Athabasca River, North Saskatchewan River, Lac St. Cyr and Cache Lake. The fish in the Athabasca River were declared fit for human consumption as the flesh was no longer detectably tainted. The mercury levels in goldeye, walleye, sauger and pike in the North Saskatchewan River were still above federal health standards; hence warnings on human consumption were again made.

The Fisheries Access group completed construction of the Star, Dolberg and Lower Chain lakes sites. Regional staff provided field assistance and an assessment of the public access needs for Lac Delorme.

5. WILDLIFE

The wildlife resource in the NE Region includes a wide variety of wildlife species which range from a parkland agricultural area to boreal forest, Canadian Shield and major urban areas. The area encompasses 27 complete and 13 partial big-game wildlife management units (WMUs), three partial bird game zones and one complete and three partial fur trapping zones.

The results achieved by the Wildlife Section are broken down into five categories: inventory, monitoring populations, monitoring users, integrated management programs and special programs.

5.1 Inventory

No wildlife inventories were done in 1983/84.

5.2 Monitoring Populations

Ungulates. In 1983-84, eight WMUs were monitored (Table 15) for ungulate densities. In addition to monitoring populations, moose tick monitoring was also completed in three WMUs.

Waterfowl. The status of waterfowl in the province is described in Table 16. This includes a comparison of population sizes over the past three years.

In addition to the above-mentioned monitoring, colonial nesting bird monitoring was also carried out. The results of this monitoring is as follows: in a 1983/84 census, three cormorant colonies, three grebe colonies and three great blue heron colonies increased in size by 50 percent, 20 percent and 40 percent respectively from 1980 figures.

Upland Birds. A limited amount of population monitoring of upland birds was completed in 1983/84. Table 15 indicates which locations were monitored for sharptailed grouse populations.

Furbearers. No monitoring of furbearer populations was done in 1983/84.

Table 15.

UNGULATE POPULATION MONITORING IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

WMU	Species	Density (per sq. km) 1982/83	1983/84
P233	WT	2.1	3.8
	MD	0.34	0.61
P235	WT	2.9	4.1
	MD	0.49	0.65
P242	WT	1.0	1.2
	Elk	0.14	0.98
	Moose	0.57	0.41
M506**	Moose	31% hair loss	10% hair loss
M511*	Moose	78/79 0.48	0.41
M513* ** and M514* **	Moose	82/83 0.22	0.21 -- minimal hair loss
M517* and M518*	Moose	77/78 0.21	0.15

NOTE: Total regional cost-- $16,216.
WT -- white-tailed deer; MD -- mule deer.

Summary: Over a five year period the trend established in the north is a decrease in moose density from 0.19/sq. km to 0.13/sq. km. The trend in the southern area is a decline over a five-year period from 0.57/sq. km to 0.19/sq. km. The trend in the northwest part of the region (Calling Lake area) over the same period is a small decline from 0.48/sq. km to 0.38/sq. km. Tick infestation appeared to have reached a peak in 1978-1981 and has apparently undergone a significant decline at present.

* Partial WMU.
** WMU checked for tick infestation.

Table 16.

COMPARISON OF WATERFOWL STATUS IN ALL REGIONS OF THE FISH AND WILDIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Provincial Pond Index	569,300	518,500	495,300
Provicial Mallard Breeding Population	1,571,400	1,371,800	1,705,300
Provincial Total Ducks	7,951,400	6,504,500	7,135,100
Geese numbers	1,085	870	1,171

NOTE: Although there has not been a significant change in duck numbers in the three-year period, the total is much below that of 1975. A large decline became apparent in 1976, especially in mallard numbers, and continued to be depressed. The goose numbers were provided by the Canadian Wildlife Service/Fish and Wildlife surveys. Goose bale monitoring showed 10.5% of 220 sites were used.

Table 17.

COMPARISON OF SHARPTAILED GROUSE MONITORING IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	Average number of males per dancing grounds.		
WMU	1981/82	1982/83	1983/84
P233 and P235 (Camp Wainwright)	14.6	14.5	13.4
P258	19.0	17.8	15.6

NOTE: Total regional cost -- $1,066.
Slight decline in male population is seen.

5.3 Monitoring Users

Ungulates. Based upon the big game incisor bar statistical report, random monitoring of recreational hunters indicated success to be 24.2 hunter days per moose, 8.3 hunter days per mule deer and 14.2 hunter days per white-tailed deer. A total of 133 moose hunters and 871 deer hunters were checked. Subsistence hunters, numbering 250, harvested 38 moose. Domestic hunters were not monitored.

Waterfowl. In 1983/84, waterfowl hunter monitoring was very limited. A one-man survey conducted in the Vegreville district and a small portion of the Provost district indicated success achieved for various species.

Table 18.

SUCCESS ACHIEVED FOR VARIOUS WATERFOWL SPECIES IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEAR 1983/84.

Number of Hunters	White-Fronted Geese	Canada Geese	Snow Geese	Ross's Geese	Unidentified Geese
321	44	37	10	3	2
	Snipe	Ducks			
	4	236			

Upland Birds. Hunter checks by officers in the Vegreville area and a hunter check station in Camp Wainwright (P233 and P235) resulted in a total of 377 upland bird hunters being monitored (Table 19).

Table 19.

HUNTER SUCCESS ACHIEVED FOR VARIOUS UPLAND BIRD SPECIES IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEAR 1983/84.

Number of Hunters	Pheasants	Sharp-Tailed Grouse	Ruffed Grouse
377	105	313	43

Furbearers. The number of 1983/84 registered and resident trappers in the NE Region totalled 2,786 (Table 20).

Table 20.

COMPARISON OF TRAPPERS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Junior Partners	513	512	499
Senior Partners	351	361	362
Total Registered Trappers	864	873	861
Resident Trappers	2,361	1,896	1,925
Total Trappers	3,225	2,769	2,786

A comparison of the harvest over the past two years indicates an increase in the number of fur-bearing animals harvested but a decrease in the value of the fur (1983/84 figures not available at time of printing).

Table 21.

COMPARISON OF FURBEARER HARVEST IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82 AND 1982/83.

Species	No. Harvested		Dollar Value	
	1981/82	1982/83	1981/82	1982/83
Badger	5	11	155.00	415.47
Lynx	2,062	1,630	586,865.82	456,660.80
Black Bear	15	51	672.00	2,972.79
Marten	43	95	1,578.53	3,968.15
Grizzly Bear	-	-	-	-
Beaver	8,353	9,302	175,245.94	163,622.18
Mink	1,843	1,675	58,607.40	43,751.00
Bobcat	11	-	1,850.31	-
Muskrat	12,024	8,336	38,356.56	21,173.44
Cougar	-	-	-	-
Otter	163	197	6,780.80	8,236.57
Coyote	2,083	3,917	144,955.97	229,653.71
Rabbit	-	-	-	-
Weasel	1,674	1,545	2,243.16	3,306.30
Raccoon	-	1	-	21.88
Fisher	785	1,160	106,563.75	146,809.60
Skunk	38	24	240.16	120.00
Squirrel	21,476	34,280	32,643.52	45,935.20
Silver Fox	36	32	2,441.52	1,429.12
Cross Fox	217	209	19,059.11	18,325.12
Blue Fox	1	-	85.00	-
Red Fox	395	453	22,973.20	19,950.12
White Fox	1	1	36.70	29.95
Timber Wolf	72	117	6,354.00	11,187.54
Wolverine	8	7	1,478.32	1,223.04
Total	51,305	63,043	1,209,186.77	1,178,791.98

NOTE: Dollar values for castor are not available.

5.4 Integrated Management Programs

5.4.1 Stocking and Transplants

Table 22 lists the location and number of wildlife transplanted in the NE Region in 1983/84.

No transplants of ungulates were made in 1983/84 in the NE Region but monitoring of the elk transplant north of Athabasca did occur at a cost of $6,229.

Table 22.

WILDLIFE TRANSPLANTS IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

Species	Location	Number
Geese	Alberta Wildlife Park	14
Geese	Ashmont area	77
Geese	Calahoo area	57
Geese	Clifford E. Lee Sanctuary	65
Pheasants	Lychak	1,300
Pheasants	Road allowance south of Myrnam	100
Pheasants	Private property south of Beauvallon	336
Pheasants	Fish and Wildlife property north of Daysland	400
Pheasants	Vegreville railway	1,132
Pheasants	Minburn pasture	400
Pheasants	St. Paul pasture	455
Total		4,336

Total NE Region cost: $28,839.50.

5.4.2 Habitat Development (Buck for Wildlife)

In 1983/84, four projects were worked on with an expenditure of $57,830.07 (Table 23). A comparison of the Buck for Wildlife Projects over the past three years is made in Table 24.

Table 23.

SUMMARY OF WILDLIFE BUCK FOR WILDLIFE PROJECTS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEAR 1983/84.

Project	Monies Spent($)	Results Achieved
Lychak	22,885.07	(a) Continued contract to monitor effects of grazing and development of rest rotation system compatible to wildlife habitat needs. (b) Fencing of rotational pastures. (c) Signs for public information. (d) Provided 57 tonnes of hay and 175 animal months of grazing.
Whitford Lake	5,000.00	Seeding of 80.9 ha of nest cover.
Management Option Development on Fish and Wildlife controlled lands	14,945.00	Contract to develop habitat management options, public use and accommodate compatible agricultural activities on six properties owned or controlled by the Fish and Wildlife Division.
Manatoken Lake Sterilization Plan	15,000.00	Contributed to lake stabilization and marsh maintenance project in co-operation with Ducks Unlimited.
Total cost	$57,830.07	

Table 24.

COMPARISON OF WILDLIFE BUCK FOR WILDLIFE PROJECTS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Number of Projects	3	4	4
Monies Spent($)	$11,020.00	$70,205.69	$57,830.07

5.4.3 Regulatory Functions

Considerable time and effort was made in reviewing and simplifying the hunting regulations during 1983/84 at a total cost of $860. and eight man-weeks to the region.

A major review of the moose management regulations in the NE Region was also undertaken and completed at a total cost of $320. and three man-weeks to the region.

5.4.4 Public Access

Public access programs were developed and carried out at the Lychak Buck for Wildlife project and at the Connors Creek Grazing Reserve. Both were done to better complement use on these lands and both proved to be very successful. Cost involved to the region was $1,420. and 1.4 man-weeks.

5.5 Special Programs

5.5.1 Crop Depredation Control Program

In 1983/84, a total of $102,612.33 was spent to prevent damage to agricultural crops by ducks. The program involved six bait or lure areas in the following locations: Brosseau, Kenilworth, Flat Lake, McCullough Lake, Beaverhill Lake (west and Whitford Lake. Also involved were six scare areas in the) following locations: Manatoken Lake, Derwent, Clark Lake, Provost, Beaverhill Lake (east)and Highway 28 (10.5 km west of St. Paul). Table 25 compares the cost of the program over the past three years.

Table 25.

COMPARISON OF CROP DEPREDATION CONTROL PROGRAM IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 and 1983/84.

	1981/82	1982/83	1983/84
Number of Complaints	88	93	132
Feeding Costs	$35,441.00	$40,279.24	$43,993.05
Scaring Costs	$37,623.00	$40,069.95	$58,619.28
Total Cost	$73,064.00	$80,349.19	$102,612.33
Duck-days	995,925	1,661,980	1,914,250
Amount of Grain Used (Tonnes)	191.8	306.8	335.4
Cost/Duck/Day	7.3¢	4.8¢	5.4¢

5.5.2 Trappers Compensation Program

In 1983/84 the program cost the region $29,466.96. There were 35* concerns recieved of which 16 went to the Trappers Compensation Board. Table 26 compares the amount paid to the claimants over the past three years. A total of $6,158.49 was paid out in 1983/84; the majority of these claims involved thefts.

Of special note was a private settlement between Syncrude Ltd. and a trapper in the Fort McKay area. Considerable monies were exchanged in that settlement.

Table 26.

COMPARISON OF TRAPPER COMPENSATION CLAIMS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Provincial Claims Received	55	38	53
Provincial Claims Before The Board	28	32	51
NE Region Claims Before The Board	11	10	16
Amount Paid to the NE Region	$1493.69	$3818.50	$6158.49

5.5.3 Nuisance Wildlife

Continuation of trapper education for the purpose of removing wolves occurred in 1983/84.

* This number is uncertain.

5.5.4 Game Ranching

Some monitoring of the Kikino Metis Colony game ranch occurred in 1983/84. Also some discussion of game ranching has occurred with the Fort McKay Indian Band. The total count of game ranches and the inventory of stock in the NE Region are identified in Table 27.

Table 27.

GAME RANCHES IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEAR 1983/84.

Game Ranch	Inventory of Stock			
Kikino Metis Colony	64 Buffalo	28 Elk	6 Moose	7 Deer

5.5.5 Other Activities

Other activities were undertaken by the Wildlife section of the Fish and Wildlife Division. Many of these required considerable planning effort. Those of special note are listed below.

- --Lily Lake: Time was spent on investigating feasibility or options in lieu of establishing a sanctuary at Lily Lake. The result is that no sanctuary will be constructed.
- --Blackfoot Grazing Reserve: Activites of the implementation stage included directing clearing operations and ungulate fence preparation.
- --Island Lake Heron Protection: Protection of 25 heron nesting trees from beavers was undertaken by wrapping the trees with wire.
- --Land Use Planning: Considerable effort was spent on the following planning activities: Big Bend Integrated Resource Plan (IRP), Slave River hydro, Beaver River water resource study, Lakeland IRP, and Beaverhill IRP.
- --Public Displays: Construction of public office displays on upland birds, wolves, fisher, and marten were also undertaken.

The cost of these special activities is $13,058.

6. ENFORCEMENT/FIELD SERVICES

The Enforcement/Field Services Section of the NE Region complEments the overall management of Fish and Wildlife resources by providing regulatory, public service (nuisance wildlife, general complaints) and education/information functions. The results achieved by this section will be reflected under the three categories stated above.

6.1 Regulatory

In 1983/84 a total of 1,349 violations resulted in prosecutions. Of this, 26.8 percent involved the Wildlife Act/Regulations, 43.1 percent the Fisheries Act/Regulations and 30.1 percent involved other acts. Table 28 compares the types of violation over the past three years and also provides a breakdown of the types of violations.

The total number of warnings issued during 1983/84 was 919, an increase over the past two years.

The total cost of the regulatory portion of the NE Region was $567,319.47 (44.2 percent of the Enforcement/Field Services Section budget).

6.2 Public Service

The public service aspect of the Enforcement/Field Services responsibility includes nuisance wildlife work and removal of wildlife where public safety is threatened. Issuance of licences or permits and complaints about fish and wildlife in general are other concerns. A still different but also very important aspect is investigation of livestock loss claims where officer expertise is called upon to identify the species of predator involved and initiate appropriate remedial action.

In addition to the foregoing, officers supervise all commercial fishery operations, maintain quality control, and terminate fisheries when limits are reached. In their normal course of duty, they also collect catch data from anglers and record wildlife harvests in the field during hunting seasons. They play an invaluable role in support of management programs.

Table 28.

COMPARISON OF VIOLATIONS IN THE NE REGION
OF THE FISH AND WILDLIFE DIVISION
FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Fisheries Violations			
Overpossession	48	10	16
Commercial Fisheries	1	7	13
Indian Domestic	4	10	33
Other	255	383	519
Total	308	410	581
Wildlife Violations			
Night Hunting	21	7	28
Illegal Wildlife	90	42	109
Human Safety	114	1	66
Indian Hunting	8	-	-
Fur Regulations	16	1	3
Other	147	249	155
Total	396	300	361
Other Violations			
Boating Restriction	-	-	-
Boating Safety	88	123	111
Litter	9	17	20
Liquor	114	111	117
Other	105	93	159
Total	316	344	407
Total Violations	1,020	1,054	1,349
Number of Warnings	734	830	919

6.2.1 Nuisance Wildlife

In 1983/84 the number of nuisance wildlife complaints increased to 5,310, of which 40.9 percent were beaver complaints. A large increase in complaints was noted in the others category, largely a result of skunk complaints. Table 29 compares the types of nuisance wildlife complaints over the past three years.

Table 29.

COMPARISON OF NUISANCE WILDLIFE COMPLAINTS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Beaver --County	918	1277	1269
--F&W	296	303	905
Total	1214	1580	2174
Wolves	40	100	69
Bears	401	442	579
Ungulates	120	220	369
Others	627	911	2119
Total	2402	3253	5310

6.2.2 Licences Issued

In 1983/84, 60,051 licences were issued in the NE Region. Table 30 lists the types of licences issued and compares the number over the past three years.

Table 30.

COMPARISON OF LICENCES ISSUED IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

Licence Type	1981/82	1982/83	1983/84
Wildlife Certificate	19,091	17,853	16,720
Migratory Bird Permit	5,124	4,861	4,485
Resident Trapper	2,361	1,896	1,764
Registered Trapline Renewal	932	827	840
Hunting Licences:			
-- Resident	27,227	26,265	24,558
-- Non-Resident	944	795	952
-- Duplicate tags, stamps	772	969	1,057
Fur Dealers	40	28	22
Fur Tax	87	285	262
Taxidermists	38	49	73
Game Bird Farm	229	291	286
Big Game Farm	1	1	1
Guides	280	318	308
Special Guiding Authority	76	92	85
Tanners	1	5	--
Commercial Fisherman	710	1,011	807
Commercial Bait Fishing	32	41	60
Angling Licences	5,334	5,194	4,086
Spear Fishing	267	306	269
Trophy Lakes	1,612	1,452	1,123
Private Game Fish Farm	303	373	304
Indian Domestic	750	951	1,088
Other	141	117	901
Total	66,352	63,980	60,051

6.2.3 Dead Wildlife Possession

The number of permits issued to possess dead wildlife in 1983/84 was 453; 75 were rejected. Table 31 compares these numbers over the past three years and also identifies to which species permits were issued.

Table 31.

COMPARISON OF FOUND DEAD WILDLIFE POSSESSION IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

Species	1981/82		1982/83		1983/84	
	App.	Den.	App.	Den.	App.	Den.
Great Horned Owl	-	-	184	21	276	29
Swainson's Hawk	-	-	16	1	19	2
Whitetailed Deer	-	-	6	1	15	1
Snowy Owl	-	-	10	1	14	0
Great Grey Owl	-	-	16	1	13	0
Red-tailed Hawk	-	-	7	2	13	0
Other	-	-	70	26	103	43
Total	156	78	309	53	453	75

6.2.4 General Complaints

In 1983/84 the number of complaints increased to 7,600 while the number of requests for information decreased to 117,890. Table 32 compares the number of complaints to the number of requests for information over the past three years.

The total monies spent on the public service portion of the Enforcement/Field Services Section in the NE Region was $147,618.42 (this does not include clerical time spent issuing licenses).

Table 32.
COMPARISON OF INFORMATION REQUESTS AND COMPLAINTS RECEIVED IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84

	1981/82	1982/83	1983/84
Number of Requests	--	121,140	117,890
Number of Complaints	5,580	6,651	7,600

6.3 Education/Information

In 1983/84, the NE Region Enforcement/Field Services Section expended effort on public talks, National Wildlife Week, media contacts, sportsman shows, and trade fairs. The total effort in the Enforcement/Field Services Section resulted in an expenditure of $30,708.39, which is 2.4 percent of the Enforcement/Field Services budget. Tables 35 and 36 compare the effort over the past three years. The results achieved are summarized for the entire region in Section 8.1 of this report.

6.4 Special Programs

In 1983/84, the Enforcement/Field Services Section of the region became involved in special efforts including the following: Suncor pollution trial; illegal Indian Domestic fishing; Winefred Lake recreational fishery; County of Athabasca, County of Strathcona and County of Leduc firearm discharge prohibition proposals; deer problems in the County of Strathcona; wolf control programs near Kikino and south of Athabasca; and assorted beaver control problems.

Special emphasis was also placed on spring migratory bird protection and maintaining added surveillance during the spring fish spawning to assure that they are not molested during these brief but critical times of the year.

7. HABITAT PROTECTION

The Habitat Protection Section of the NE Region complements overall management of fish and wildlife resources by providing an input on many land-use activities which could affect these resources. The areas of particular concern include:

1. Industrial activities such as oil and gas, coal and mineral development
2. Agricultural development activities
3. Water resource development such as dam construction and channelization
4. Recreational developments such as subdivisions
5. Road construction
6. Timber harvesting activities
7. Urban development.

The functional areas of this section include referrals on specific developments, integrated planning of fairly large areas and educational efforts.

7.1 Land Use Referrals

In 1983/84, the Habitat Protection Section reviewed a total of 1,544 referrals which involved approximately 69,776.2 hectares of land within the NE Region. Table 33 summarizes the number of referrals on the various types of land-use activities and compares this number for the past three years.

7.2 Land Planning Activities

In 1983/84 the NE Region was involved in nine major land-use planning exercises, involving a total of 2,372,935 hectares. Table 34 lists the various specific plans which required Fish and Wildlife Division input.

Table 33.

COMPARISON OF LAND USE REFERRALS IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84	
	No.	No.	No.	Area (ha)
Public Lands Referrals	551	343	568	5,214.5
Exploration Referrals	33	76	159	6,344.5
Alberta Environment Referrals:				
Water Resources	132	120	276	--
Municipal Affairs Referrals:				
Subdivisions	134	117	235	5,462.3
Transportation Referrals	11	16	52	--
Agricultural Referrals	-- (51,998 ha)	139 (39,269 ha)	230	52,754.9
Reclamation and Development Referrals	--	5	24	--
Total	861	816	1544	69,776.2

Table 34.

COMPARISON OF LAND PLANNING ACTIVITIES IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

Name	Area (ha) 1981/82	1982/83	1983/84
Lakeland	348,171	348,171	348,171
Big Bend	453,004	453,004	453,004
Blackfoot	9,710	9,710	9,710
Beaverhill	6,070	6,070	completed
Beaver River Basin	1,007,000	1,007,000	1,007,000
Peace-Athabasca Delta Implementation Committee	--	--	503,400
East Frenchman Operational Plan	--	--	*16,000
South of Beaver Lake Operating Plan	--	--	*1,600
Wabamun Lake Lake Management Plan	--	--	34,050
Total Area	1,823,955	1,823,955	2,372,935

* Included in Lakeland Plan.

7.3 Educational Activities

A summary of all NE Region activities in educational activities is summarized in the Section 8.1.

7.4 Special Activities

Considerable effort was exercised on the following activities during 1983/84: Suncor pollution trial, advise on potential violations to various habitat-related sections of the Fisheries Act and agricultural expansion in the region.

8. GENERAL PROGRAMS

Certain general programs were carried out in the NE Region in 1983/84 and these are reflected in this section.

8.1 Education/Information

In 1983/84 the National Wildlife Week campaign was a major effort in the region. Table 35 identifies the number of persons who were contacted during the 1984 program and compares it with the past two years.

Table 35.

COMPARISON OF NATIONAL WILDLIFE WEEK ACTIVITIES IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Number of People Contacted	1,672 students 75 adults	6,045 students 4,000 adults	6,392 students 14,000 adults
Total	1,747	10,045	20,392

Note: Poster displays, poster contests and public talks were carried out in all districts. A total of 43 schools throughout the NE Region were visited and four mall displays were arranged to promote National Wildlife Week.

Further efforts were made in meetings with Fish and Game clubs at the local, zone and provincial level. The total number of Fish and Game clubs attended by regional staff in 1983/84 was 14 by the Regional Director, six by Fisheries staff, 11 by Wildlife staff, 56 by Enforcement/Field Services staff and none by the Habitat staff for a total of 87.

The number of news items proposed by NE Region staff during 1983/84 is compared with the past three years in Table 36.

Table 36.

COMPARISON OF PUBLIC EDUCATION IN THE NE REGION OF THE FISH AND WILDLIFE DIVISION FOR THE YEARS 1981/82, 1982/83 AND 1983/84.

	1981/82	1982/83	1983/84
Number of News Items	9	20	12
Number of Public Talks	--	239	N/A

The Fish and Wildlife Public Advisory Committee tour was held in the Lac La Biche, Cold Lake, St. Paul and Vegreville areas in August, 1983, and proved to be successful. The assistant deputy minister tour in October, 1983, was also a valuable activity. Specific meetings with various Indian band councils, county councillors, trappers groups and commercial fishermen and others also helped to inform the public.

The total effort and money spent on this public service amounted to $88,158.54, of which the Enforcement/Field Services Section provided 34.8 percent.

8.2 Boating Restriction Regulations

In 1983/84, the Fish and Wildlife Division in the NE Region reviewed and conducted regional input for 10 requests for boating restrictions. The reviews included the following water bodies: Bonnie Lake, Vincent Lake, Fork Lake, Bonnyville Town Pond, Unnamed Lake (Happy Hollow), Long/Narrow Lake, Thunder Lake, Hope Lake, Moose Lake, and Lac Sante Park.

8.3 Prohibitions for Discharge of Firearms

In 1983-84, three requests for prohibiting the discharge of firearms were made by the following counties: County of Athabasca, County of Strathcona and County of Leduc.

In all cases the local governments were convinced that existing legislation was sufficient to protect public safety and interest.

8.4 Administration

Administration continued to be a major cost to the entire regional budget but has been reduced somewhat. The future expectation is to reduce administration costs further.

In 1983/84, several key results such as the Buck For Wildlife programs, the grazing lease programs and the continuous regulatory programs were achieved in the NE Region. It is expected that 1984/85 will bring tighter budgets and, hence, more cost-effective and efficient operations will be expected. The public demand upon resources is still increasing and is becoming more and more an important factor in impacting upon the resource base. The future will require strong efforts from Fish and Wildlife Division personnel and greater involvement from the public in the management of public fish and wildlife resources.

Appendix 1

FISH STOCKING AND TRANSPLANTS CONDUCTED IN THE
NE REGION OF THE FISH AND WILDLIFE DIVISION
DURING THE YEAR 1983/84

District	Location	Species	Quantity	Cost $
Athabasca	Boyle Pond	Rainbow Trout	4,000	4,360.00
Athabasca	Lower Chain Lake	Rainbow Trout	40,000	3,200.00
Athabasca	Westlock Recreational Pond	Rainbow Trout	2,300	8,910.00
Total	3		46,300	16,470.00
Barrhead	*Brock Lake	Yellow Perch	24,700	18,278.00
Barrhead	Dolberg Lake	Rainbow Trout	30,000	13,500.00
Barrhead	Peanut Lake	Rainbow Trout	15,000	6,750.00
Barrhead	*Thunder Lake	Yellow Perch	30,400	22,496.00
Total	4		100,100	61,024.00
Edmonton	Broadmoor Lake	Rainbow Trout	3,000	5,900.00
Edmonton	*Hastings Lake	Yellow Perch	36,000	26,640.00
Edmonton	Hawrelak Park Pond	Rainbow Trout	4,000	6,800.00
Edmonton	Hermitage Park Pond	Rainbow Trout	3,000	5,900.00
Total	4		46,000	45,240.00
Leduc	Ashland Reservoir	Rainbow Trout	13,000	1,040.00
Leduc	Leduc Reservoir	Rainbow Trout	5,000	8,500.00
Leduc	Sardine Lake	Rainbow Trout	6,500	520.00
Total	3		24,500	10,060.00

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Appendix 1. (continued)

District	Location	Species	Quantity	Cost $
Stony Plain	Big Chickakoo Lake	Rainbow Trout	11,200	19,040.00
Stony Plain	Cardiff Park Lake	Rainbow Trout	12,500	1,000.00
Stony Plain	Hermitage Lake	Rainbow Trout	10,000	10,750.00
Stony Plain	Lacombe Park Pond	Rainbow Trout	1,300	2,210.00
Stony Plain	Saver Lake	Rainbow Trout	9,000	15,300.00
Stony Plain	Spring (Cottage) Lake	Rainbow Trout	8,000	3,600.00
Stony Plain	Star Lake	Rainbow Trout	14,000	6,300.00
Stony Plain	*Wabamun Lake	Walleye	1,050,245	84,019.60
Total	8		1,116,245	142,219.60
Vegreville	Black Nugget Mine Pit	Rainbow Trout	14,000	12,460.00
Vegreville	Mundare Pond Lake	Rainbow Trout	300	135.00
Vegreville	Veg Children's Pond	Rainbow Trout	1,500	2,550.00
Total	3		15,800	15,145.00
Bonnyville	Bonnyville Town Pond	Rainbow Trout	500	850.00
Total	1		500	850.00
Cold Lake	*Cold Lake	Lake Trout	150,000	67,500.00
Cold Lake	Hasse Lake	Rainbow Trout	30,000	2,400.00
Cold Lake	Medley River	Rainbow Trout	2,000	900.00
Cold Lake	Unnamed Lake	Rainbow Trout	6,000	2,700.00
Total	4		188,000	73,500.00
Provost (North)	Capt. Eyre Lake	Rainbow Trout	7,500	3,375.00
Provost (North)	Pro-Alta Pond	Rainbow Trout	2,500	1,125.00
Total	2		10,000	4,500.00
St. Paul	Lac Delorme	Rainbow Trout	33,500	2,680.00
St. Paul	*Lac Sante	Yellow Perch	38,000	28,120.00
St. Paul	Two Hills Pond	Rainbow Trout	1,000	1,700.00
Total	3		72,500	32,500.00

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Appendix 1. (continued)

District	Location	Species	Quantity	Cost $
Smoky Lake	Bellis Lake	Rainbow Trout	18,029	30,649.30
Smoky Lake	Namepi Creek	Rainbow Trout	1,000	1,700.00
Smoky Lake	Shemeluk Lake	Rainbow Trout	8,013	13,622.10
Total	3		27,042	45,971.40
Vermilion	Dillberry Lake	Rainbow Trout	30,000	13,500.00
Vermilion	Lloydminster Pond	Rainbow Trout	400	430.00
Vermilion	Owen's Pond	Rainbow Trout	1,000	450.00
Vermilion	Shuster Lake	Rainbow Trout	3,800	1,710.00
Vermilion	Wallace Park Pond	Rainbow Trout	2,000	2,150.00
Total	5		37,200	18,240.00
Grand Total	43		1,684,187	465,720.00

* Indicates transplants.

NOTE: Stocking costs based upon size of stocked fish:

-- 8¢ for eggs, fry and fish 5-10 cm long
-- 45¢ for fish 10-15 cm long
-- $1.70 for yearlings and fish 15 cm and over
-- $5 for adults

POOR

QUALITY

ORIGINAL